PIONEER CORPORATION
4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654, JAPAN

PIONEER ELECTRONICS (USA) INC.
P.O. Box 1760, Long Beach, California 90801, U.S.A.
TEL: (800) 421-1404

PIONEER EUROPE NV
Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium
TEL: (0) 3/570.05.11

PIONEER ELECTRONICS AUSTRALIA PTY. LTD.
178-184 Boundary Road, Braeside, Victoria 3195, Australia
TEL: (03) 9586-6300

PIONEER ELECTRONICS OF CANADA, INC.
300 Allstate Parkway, Markham, Ontario L3R OP2, Canada
TEL: (905) 479-4411

PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.
San Lorenzo 1009 3er. Piso Desp. 302
Col. Del Valle Mexico, D.F. C.P. 03100
TEL: 5-688-52-90

先鋒股份有限公司
總公司：台北市中山北路二段44號13樓
電話：(02) 2521-3588

先鋒電子（中國）有限公司
北京總事處：北京市朝陽區東大橋路9號侨福芳草地D座
17樓 1704-06室
電話：(0852) 2848-6488

< KKYLL/00G00000 >

Published by Pioneer Corporation.
Copyright © 2000 by Pioneer Corporation
All rights reserved.

Publication de Pioneer Corporation.
Copyright © 2000 Pioneer Corporation.
Tous droits de reproduction et de traduction réservés.

Printed in Singapore
Imprimé à Singapour
<CRD3281-A/JS> ES

High power CD player with FM/AM tuner

SUPER TUNER III

Operation Manual

DEH-2350
DEH-1350

Pioneer

ENGLISH
ESPAÑOL
PORTUGUÊS (B)
中文
العربية

Contents

Key Finder 2
- Head Unit

Before Using This Product 3
- About This Manual 3
- Precaution 3

Basic Operation 4
- To Listen to Music 4
- Basic Operation of Tuner 5
  - Manual and Seek Tuning
  - Preset Tuning
  - Band
- Basic Operation of Built-in CD Player 6
  - CD Loading Slot
  - Eject
  - Track Search and Fast Forward/Reverse

Tuner Operation 7
- Local Seek Tuning
- Best Stations Memory (BSM)

Using the Built-in CD Player 8
- Repeat Play
- Random Play
- Scan Play
- Pause

Audio Adjustment 9
- Selecting the Equalizer Curve 9
- Entering the Audio Menu 9
- Audio Menu Functions 10
  - Balance Adjustment (FADER)
  - Equalizer Curve Adjustment (EQ)
  - Loudness Adjustment (LOUD)
  - Front Image Enhancer Function (FIE)
  - Source Level Adjustment (SLA)

Detaching and Replacing the Front Panel 13
- Theft Protection 13
  - Detaching the Front Panel
  - Replacing the Front Panel

Initial Setting 14
- Entering the Initial Setting Menu 14
- Initial Setting Menu Functions 15
  - Setting the Time
  - Changing the FM Tuning Step (FM)
  - Changing the AM Tuning Step (AM)

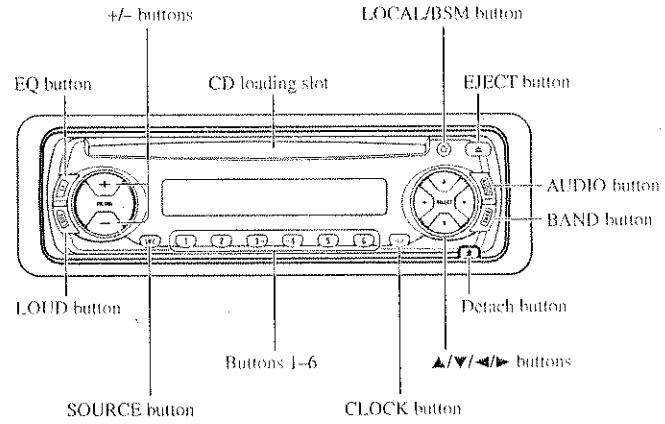
Other Functions 17
- Displaying the Time 17

CD Player and Care 18
- Precaution 18
- Built-in CD Player's Error Message 19

Specifications 20

Key Finder

Head Unit



ENGLISH

Before Using This Product

About This Manual

This product features a number of sophisticated functions ensuring superior reception and operation. All are designed for the easiest possible use, but many are not self-explanatory. This operation manual is intended to help you benefit fully from their potential and to maximize your listening enjoyment.

We recommend that you familiarize yourself with the functions and their operation by reading through the manual before you use this product. It is especially important that you read and observe the "Precaution" on this page and in other sections.

Precaution

CAUTION:	USE OF CONTROL OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
CAUTION:	THE USE OF OPTICAL INSTRUMENTS WITH THIS PRODUCT WILL INCREASE EYE HAZARD.

- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough for outside sounds to be audible.
- Protect this product from moisture.
- If the battery is disconnected, the preset memory will be erased and must be reprogrammed.
- Should this product fail to operate properly, contact your dealer or nearest authorized Pioneer Service Station.

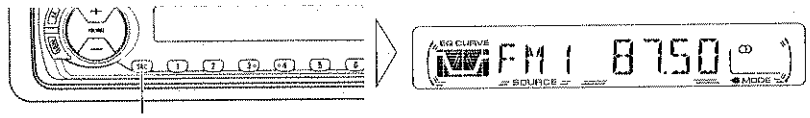
Basic Operation

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:
- Loading a disc in this product. (Refer to page 6.)

1. Select the desired source (e.g. Tuner).

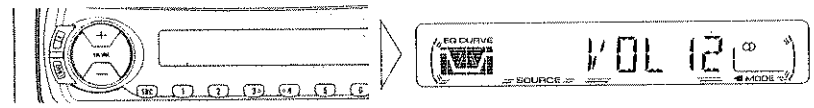


Each press changes the Source ...

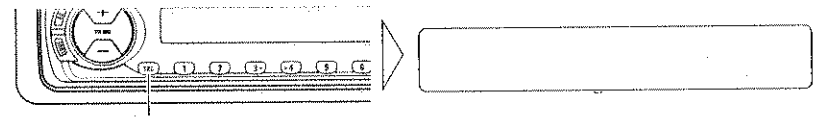
Each press of the SOURCE button selects the desired source in the following order:
Built-in CD player → Tuner

Note:
- When no disc is set in this product, built-in CD player source will not change.
- When this product's blue/white lead is connected to the car's Auto-antenna relay control terminal, the car's Auto-antenna extends when this product's source is switched ON. To retract the antenna, switch the source OFF.

2. Raise or lower the volume.



3. Turn the source OFF.



Hold for 1 second

Basic Operation of Tuner

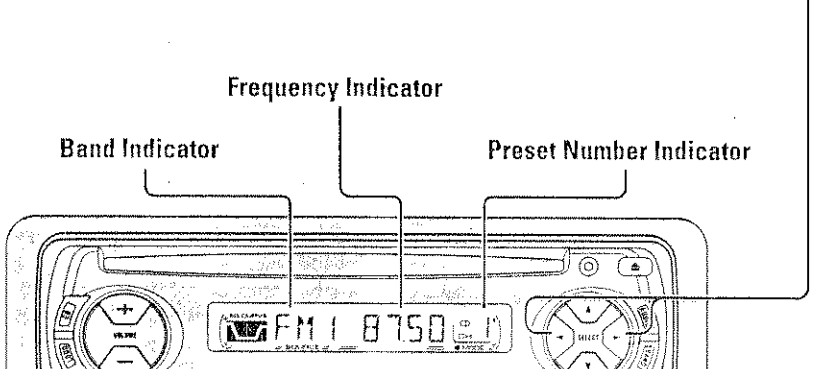
Reset the AM tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America. (Refer to page 16.)

Manual and Seek Tuning

- **You can select the tuning method by changing the length of time you press the ◄/► button.**

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:
- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcast stations. Seek Tuning starts as soon as you release the button.
- Stereo indicator "ⓒⓓ" lights when a stereo station is selected.



- **You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.**

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:
- Up to 18 FM stations (6 in FM1, FM2 and FM3) and 6 AM stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

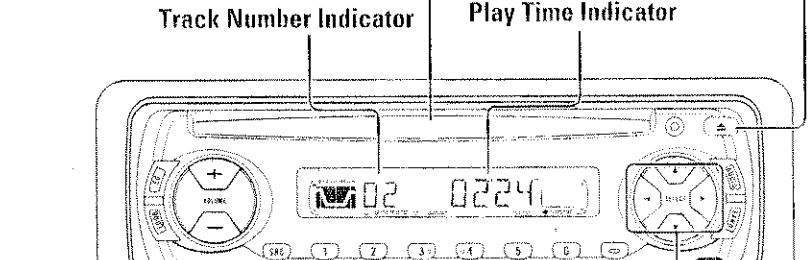
Basic Operation of Built-in CD Player

Eject

CD Loading Slot

Note:
- The built-in CD player plays one standard 12 cm or 8 cm (single) CD at a time. Do not use an adapter when playing 8 cm CD.
- Don't insert any materials except for CD into CD loading slot.

Note:
- The CD function can be turned ON/OFF with the disc remaining in this product. (Refer to page 4.)
- A disc left partially inserted after ejection may incur damage or fall out.



- **You can select between Track Search or Fast Forward/Reverse by pressing the ◄/► button for a different length of time.**

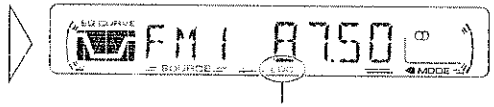
Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing

Note:
- If a disc cannot be inserted fully or playback fails, make sure the recorded side is down. Push the EJECT button and check the disc for damage before reinserting it.
- If a disc is inserted with the recorded side up, it will be ejected automatically after a few moments.
- If the built-in CD player cannot operate properly, an error message (such as "ERR-14") appears on the display. Refer to "Built-in CD Player's Error Message" on page 19.

Local Seek Tuning

This function selects only stations with especially strong signals.

- **Switch the Local ON/OFF with the LOCAL/BSM button.**



"LOC"

Best Stations Memory (BSM)

The BSM function stores stations in memory automatically.

- **Press the LOCAL/BSM button for 2 seconds to switch BSM ON.**

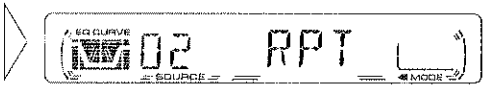
  The stations with the strongest signals will be stored under buttons 1–6 and in order of their signal strength.

- **To cancel the process, press the LOCAL/BSM button before memorization is complete.**

Repeat Play

Repeat Play plays the same track repeatedly.

- **Switch the Repeat Play ON/OFF with the button 5.**



Note:

- If you perform Track Search or Fast Forward/Reverse, Repeat Play is automatically canceled.

Random Play

Random Play plays the tracks on a disc in random order for variety.

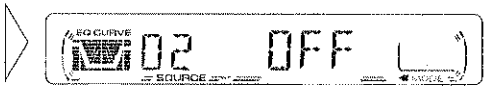
- **Switch the Random Play ON/OFF with the button 4.**

Scan Play

Scan Play plays the first 10 seconds or so of each track on a disc in succession.

1. **Switch the Scan Play ON with the button 3.**

2. **When you find the desired track, cancel the Scan Play with the button 3.**



Note:

- Scan Play is canceled automatically after all the tracks on a disc have been scanned.

Pause

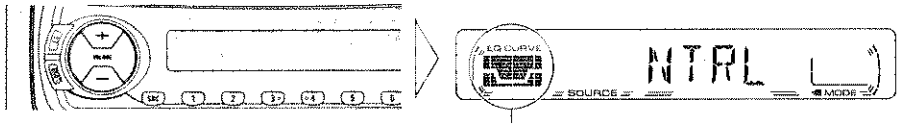
Pause pauses the currently playing track.

- **Switch the Pause ON/OFF with the button 6.**

Selecting the Equalizer Curve

You can switch between Equalizer curves.

- **Press the EQ button to select the desired Equalizer curve.**



Equalizer curve

PWRFL (powerful) → NTRL (natural) → VOCAL (vocal) → CSTM (custom) → FLAT (flat) → SBASS (super bass)

Note:

- "CSTM" stores an equalizer curve you have made adjustments to. (Refer to "Equalizer Curve Adjustment" on page 11.)

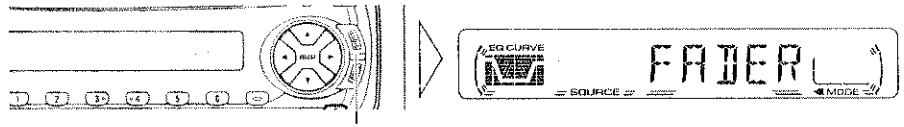
Entering the Audio Menu

With this Menu, you can adjust the sound quality.

Note:

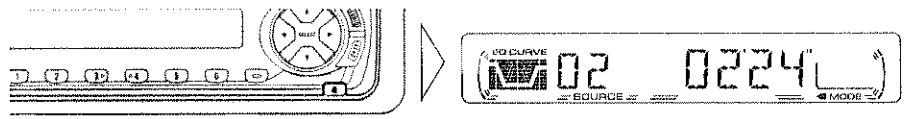
- After entering the Audio Menu, if you do not perform an operation within about 30 seconds, the Audio Menu is automatically canceled.

1. **Select the desired mode in the Audio Menu.**



Each press changes the Mode ...

2. **Operate a mode.**
3. **Cancel the Audio Menu.**



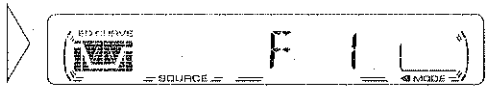
Audio Menu Functions

The Audio Menu features the following functions.

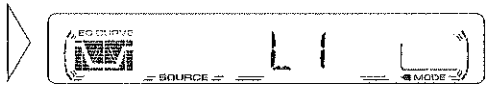
Balance Adjustment (FADER)

This function allows you to select a Fader/Balance setting that provides ideal listening conditions in all occupied seats.

1. **Press the AUDIO button and select the Fader/Balance mode (FADER) in the Audio Menu.**
2. **Adjust front/rear speaker balance with the ▲/▼ buttons.**
   "F15" – "R15" is displayed as it moves from front to rear.



3. **Adjust left/right speaker balance with the ◄/► buttons.**
   "L9" – "R9" is displayed as it moves from left to right.



Note:

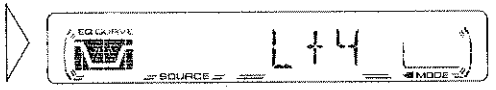
- FADER "0" is the proper setting when 2 speakers are in use.

Equalizer Curve Adjustment (EQ)

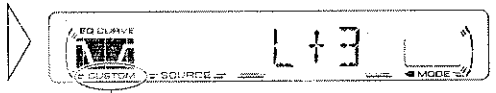
You can adjust the currently selected equalizer curve settings as desired. Adjusted equalizer curve settings are memorized in "CSTM".

1. **Press the AUDIO button and select the Equalizer mode (EQ) in the Audio Menu.**

2. **Select the band you want to adjust with the ◄/► buttons.**
   L (low) ↔ M (mid) ↔ H (high)



3. **Boost or attenuate the selected band with the ▲/▼ buttons.**
   The display shows "+6" – "–6".



"CUSTOM"

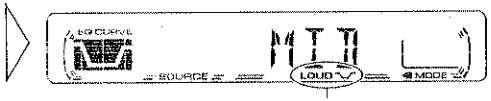
Note:
- If you make adjustments when a curve other than "CSTM" is selected, the newly adjusted curve will replace the previous adjusted curve. Then a new curve with "CUSTOM" appears on the display while selecting the equalizer curve. (Refer to page 9.)

Loudness Adjustment (LOUD)

The Loudness function compensates for deficiencies in the low and high sound ranges at low volume. You can select a desired Loudness level.

1. **Press the AUDIO button and select the Loudness mode (LOUD) in the Audio Menu.**

2. **Switch the Loudness function ON/OFF with the ▲/▼ buttons.**



"LOUD ↓"

3. **Select the desired level with the ◄/► buttons.**
   LOW (low) ↔ MID (mid) ↔ HI (high)

Note:
- You can also switch the Loudness function ON/OFF by pressing the LOUD button. However, you cannot change the level.

Front Image Enhancer Function (FIE)

The F.I.E. (Front Image Enhancer) function is a simple method of enhancing front imaging by cutting mid- and high-range frequency output from the rear speakers, limiting their output to low-range frequencies. You can select the frequency you want to cut.

Precaution:
- When the F.I.E. function is deactivated, the rear speakers output sound of all frequencies, not just bass sounds. Reduce the volume before disengaging F.I.E. to prevent a sudden increase in volume.

1. **Press the AUDIO button and select the F.I.E. mode (FIE) in the Audio Menu.**

2. **Switch the F.I.E. function ON/OFF with the ▲/▼ buttons.**

3. **Select the desired frequency with the ◄/► buttons.**
   100 ↔ 160 ↔ 250 (Hz)

Note:
- After switching the F.I.E. function ON, select the Fader/Balance mode in the Audio Menu, and adjust front and rear speaker volume levels until they are balanced.
- Switch the F.I.E. function OFF when using a 2-speaker system.

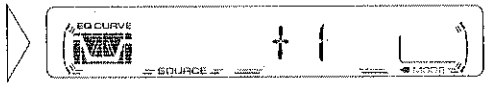
Source Level Adjustment (SLA)

The SLA (Source Level Adjustment) function prevents radical leaps in volume level when switching between sources. Settings are based on the FM volume, which remains unchanged.

1. **Compare the FM volume with the volume of the other source. (e.g. Built-in CD player)**

2. **Press the AUDIO button and select the SLA mode (SLA) in the Audio Menu.**

3. **Increase or decrease the level with the ▲/▼ buttons.**
   The display shows "+4" – "–4".



Note:
- Since the FM volume is the control, SLA is not possible in the FM modes.
- The AM volume level, which is different from the FM base setting volume level, can also be adjusted similar to sources other than tuner.

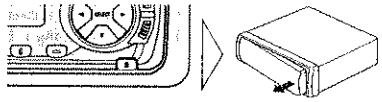
Detaching and Replacing the Front Panel

Theft Protection

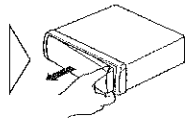
The front panel of the head unit is detachable to discourage theft.

Detaching the Front Panel

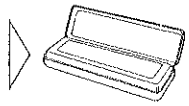
1. **Eject the front panel.**



2. **To remove the front panel, pull its right-hand side toward you.**
   Take care not to grip it tightly or drop it.



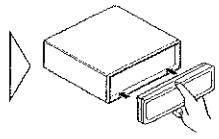
3. **Use the protective case (provided for DEH-2350) to store/carry the detached front panel.**



Note:
- The protective case is not provided for DEH-1350.

Replacing the Front Panel

- **Replace the front panel by clipping it into place.**



Precaution:
- Never use force or grip the display tightly when removing or replacing the front panel.
- Avoid subjecting the front panel to excessive shocks.
- Keep the front panel out of direct sunlight and high temperatures.

Initial Setting

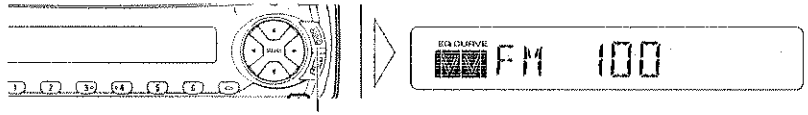
Entering the Initial Setting Menu

With this menu, you can perform initial settings for this product.

1. **Switch the source OFF.**
2. **Enter the Initial Setting Menu.**

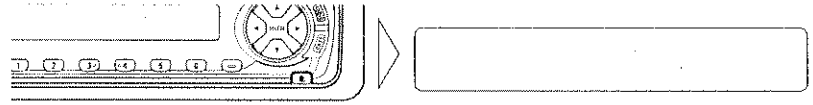
Hold for 2 seconds

3. **Select a desired mode.**



Each press changes the Mode ...

4. **Operate a mode.**
5. **Cancel the Initial Setting Menu.**



Note:
- Holding down the AUDIO button for 2 seconds also cancels the Initial Setting Menu.

ENGLISH

Initial Setting Menu Functions

The Initial Setting Menu features the following functions.

Setting the Time

This is the mode for setting the time on the unit's clock display. (Refer to page 17 for details concerning the clock display.)

1. **Press the AUDIO button and select the Time setting mode in the Initial Setting Menu.**
2. **Select "Hour" or "Minute" with the ◄/► buttons.**

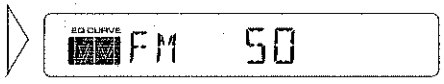
3. **Set as desired time with the ▲/▼ buttons.**

   As soon as you switch to "Minute", the seconds start counting from 00.

Changing the FM Tuning Step (FM)

The tuning step employed by Seek Tuning in the FM mode can be switched between 100 kHz (preset at the factory) and 50 kHz.

1. **Press the AUDIO button and select the FM Tuning Step mode (FM) in the Initial Setting Menu.**
2. **Select the desired tuning step with the ◄/► buttons.**



Note:

- If Seek Tuning is performed in 50 kHz steps, stations may be tuned in imprecisely. Tune in the stations with Manual Tuning or use Seek Tuning again.

Changing the AM Tuning Step (AM)

The tuning step employed in the tuner's AM band can be switched between 9 kHz and 10 kHz per step. Reset the tuning step from 9 kHz (the factory preset step) to 10 kHz when using the tuner in North, Central or South America.

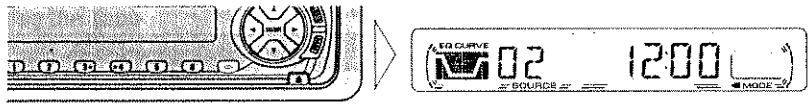
Specifications	Initial Setting	New Setting
Tuning Steps	9 kHz	10 kHz
Frequency range	531 – 1,602 kHz	530 – 1,640 kHz

1. **Press the AUDIO button and select the AM Tuning Step mode (AM) in the Initial Setting Menu.**
2. **Select the desired tuning step with the ◄/► buttons.**

Other Functions

Displaying the Time

- **To turn the time display ON.**



The time display disappears temporarily when you perform another operation, but the time indication returns to the display after 25 seconds.

Note:

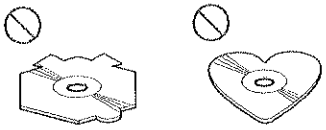
- Even when the sources are OFF, the Time appears on the display. Pressing the CLOCK button switches the Time display ON/OFF.

CD Player and Care

Precaution

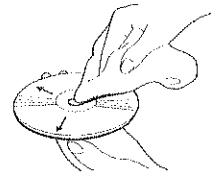
- Play only CDs bearing the Compact Disc Digital Audio mark.

- This product is designed for use with conventional, fully circular CDs only. Use of shaped CDs are not recommended for this product.



- Check all CDs before playing and discard cracked, scratched or warped discs.
- Normal playback of CD-R discs other than those recorded with a music CD recorder may not be possible.
- Playback of music CD-R discs, even those recorded with a music CD recorder, may not be possible with this product due to disc characteristics or scratches or dirt on the disc. Dirt or condensation on the lens inside this product may also prevent playback.
- Titles and other text information recorded on a CD-R disc may not be displayed by this product.
- Read the precautions with the CD-R discs before using.

- Wipe dirty or damp discs outward from the center with a soft cloth.



- Avoid touching the recorded (iridescent) surface when handling discs.
- Store discs in their cases when not in use.
- Keep discs out of direct sunlight and high temperatures.
- Do not affix labels or apply chemicals to discs.
- Condensation may collect inside the player when using the heater in cold weather, interfering with playback. Turn it off for an hour or so and wipe damp discs with a soft cloth.
- Road shocks may interrupt CD playback.

ENGLISH

Built-in CD Player's Error Message

When problems occur with CD playback, an error message appears on the display. Refer to the table below to identify the problem, then take the suggested corrective action. If the error persists, contact your dealer or your nearest PIONEER Service Center.

Message	Possible cause	Recommended action
ERR- 11, 12, 17, 30	Dirty disc.	Clean the disc.
ERR- 11, 12, 17, 30	Scratched disc.	Replace the disc.
ERR- 14	Unrecorded CD.	Check the disc.
ERR- 10, 11, 12, 14, 17, 30, A0	Electrical or mechanical problem.	Turn the ignition ON and OFF, or switch to a different source, then back to the CD player.
HEAT	CD player overheating.	Discontinue play until the machine temperature drops.

General

Power source ..... 14.4 V DC (10.8 - 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions
(DIN) (chassis) ..... 178 (W) × 50 (H) × 159 (D) mm
(nose) ..... 188 (W) × 58 (H) × 19 (D) mm
(D) (chassis) ..... 178 (W) × 50 (H) × 164 (D) mm
(nose) ..... 170 (W) × 48 (H) × 14 (D) mm
Weight ..... 1.4 kg

Amplifier

Continuous power output is 22 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD. (DEH-2350)

Continuous power output is 20 W per channel min. into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD. (DEH-1350)

Maximum power output
(DEH-2350) ..... 50 W × 4
(DEH-1350) ..... 45 W × 4

Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout maximum output
level/output impedance ..... 2.2 V/1 kΩ
Equalizer (3 Band Equalizer)
(Low) ..... Level: ±12 dB
(Mid) ..... Level: ±12 dB
(High) ..... Level: ±12 dB
Loudness contour
(Low) ..... +3.5 dB (100 Hz), +3 dB (10 kHz)
(Mid) ..... +10 dB (100 Hz), +6.5 dB (10 kHz)
(High) ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)

CD player

System ..... Compact disc audio system
Usable discs ..... Compact disc
Signal format ..... Sampling frequency: 44.1 kHz
Number of quantization bits: 16, linear
Frequency characteristics ..... 5 - 20,000 Hz (±1 dB)
Signal-to-noise ratio ..... 94 dB (1 kHz) (IEC-A network)
Dynamic range ..... 92 dB (1 kHz)
Number of channels ..... 2 (stereo)

FM tuner

Frequency range ..... 87.5 ~ 108 MHz
Usable sensitivity ..... 9 dBf
(0.8 μV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 15 dBf (1.5 μV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range ..... 531 – 1,602 kHz (9 kHz)
530 – 1,640 kHz (10 kHz)
Usable sensitivity ..... 18 μV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)
50 dB (±10 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.